

QUESTIONS/ANSWERS

CONTROLLED HYDROGEN FLEET AND INFRASTRUCTURE DEMONSTRATION AND VALIDATION PROJECT

Q.1 Will go/no go milestones be included in the contract or will the contractors be funded throughout the contract period?

A.1 A specific go/no-go decision point is not required. However, there is a logical time in the cooperative agreement for each partner to consider a go/no go decision point at the conclusion of the Generation 1 testing and the decision to proceed with Generation 2 fabrication and testing of hydrogen fuel cell vehicles.

Q.2 Is the \$1.50/gal in today's dollars?

A.2 The \$1.50/gal goal is in 2002 dollars. Other dollar amounts in the solicitation will also be stated in 2002 dollars.

Q.3 Will the national labs be allowed to participate?

A.3 Yes, in the same manner as other federal facilities where vehicles could be driven and tested. Federal laboratory personnel who have not participated the development of the solicitation can be included as team members. However, all government funding for laboratory activities that are attributed to the project will be considered as part of the government cost share. Intellectual property rights will need to be addressed during the negotiations for the award.

Q.4 2 out of 3 members of USCAR have been utilizing Ballard fuel cells in their FCVs. The draft appears to imply that only U.S.-made fuel cells will be allowed. True?

A.4 No. If it's a Application by USCAR then it is 50/50 percent cost share for the fuel cell vehicle regardless of the fuel cell manufacturer. If it is a non-USCAR Application then there is an option to have a 50/50 cost share of the fuel cell system if the manufacturer is a U.S. company. A definition of a U.S. company will be provided in the solicitation.

Q.5 Generation 1 vs 2 vs 3 may be a subjective distinction. At the extreme the cars could be painted a different color to qualify. Will there be a more definitive guide on this?

A.5 We have provided two sets of performance measures that the vehicles should meet to qualify as Generation 1 and 2 vehicles. Those requirements should be used to define the difference between the Generations.

Q.6 Are objective criteria such as the project management plan required in the submittal or post award?

A.6 Please refer to the solicitation when issued. It is up to each consortium to make sure that they each describe in sufficient detail, and the plans are in sufficient detail so each reviewer will be able to adequately evaluate each application. The solicitation will expressly state what must be included with the application and what must be delivered after the award is made.

Q.7 When is the last date for submitting comments on the draft solicitation?

A.7 We can probably take comments up until a week before the solicitation is issued. The current plan is to issue the solicitation on April 15th. Then there will be an opportunity to ask questions once the solicitation is issued. There will be specific instructions in the solicitation on how to submit them. There will also be a due date for those questions.

Q.8 How much of program data will be used for military purposes?

A.8 None of the data are going to be used for weapons systems or any other military program. The Department of Defense has a number of ongoing project efforts looking at fuel cell work and hydrogen work; those efforts are not part of this project. We're talking about GSA types of vehicles that would do non-tactical administrative work for different bases in a support role. The role of DOD is to support DOE's effort to put in commercial vehicles.

Q.9 Is natural gas reforming required? If so, why? If a team wants to use only renewables is this okay?

A.9 Natural gas reforming is not mandatory. You can use only renewable energy, but it is also allowable to use renewables to partially provide the hydrogen at a station.

Q.10 If California Fuel Cell Partnership (CaFCP) joins program do all CaFCP members then have a data reporting requirement?

A.10 No. The prime recipient will be responsible for the arrangement of the data reporting requirements to DOE. Only those members of CaFCP that are members of a proposed team will have to report data through the prime recipient.

Q.11 Does participation in Gen 1 require participation in Gen 2?

A.11 The purpose of the solicitation is to seek complete system solutions that are answers to achieving a commercialization decision regarding hydrogen fuel cells and infrastructure by 2015. The testing of solely Generation 1 vehicles is not considered a sufficient objective for this project and a plan to achieve Generation 2 vehicle performance measures is necessary.

Q.12 How do we include multiple storage options and directions within a directed project such as is being described?

A.12 That's a challenge to the proposer to come up with these ideas, to try to incorporate advanced prototypes into the vehicles so they can be tested and evaluated and give feedback to the R&D program.

Q.13 How can an Original Equipment Manufacturer (OEM) join USCAR?

A.13 You need to contact USCAR.

Q.14 What is the minimum production level of hydrogen required each day in kilograms per day?

A.14 It depends on the number of vehicles that is being proposed, and then the number of kilograms per day that would have to be produced to support the fueling of those vehicles.

Q.15 Does cost sharing include all legal fees required for each project?

A.15 The allowability of costs for legal fees will be governed by the cost principles and will be determined on a case-by-case basis. DOE cost share can be used to pay for those legal fees that are determined to be allowable. Also, any costs must meet the requirements of Federal Acquisition Regulations Part 31. <http://www.arnet.gov/far>

Q.16 Why DOD?

A.16 Commercialization is really on the shoulders of industry, because huge capital investments have to be made to commercialize this technology, and ultimately to be able to build vehicles and put infrastructure where people want to drive. However, at this point in time we feel like there's a strong Government role for helping the implementation of the technology. That is why it's not just the Department of Energy, but it's the Department of Defense, the EPA, and other Government agencies that will be involved in this overall effort.

Q.17 Is there preference for USCAR vs. non-USCAR?

A.17 No. All Applications will be evaluated the same against the criteria that are in the solicitation.

Q.18 In your remarks you stated that R&D was 80% and Demonstration 20%. Does this refer to the split for this project - your 150-240 million dollar contribution or to the total EERE budget, e.g. is this an R&D project?

A.18 No, this is a demonstration project not an R&D project. President Bush has committed to \$1.2 billion over five years in his State of the Union Address. Twenty percent of that \$1.2 billion would be for demonstration activities. That's how we calculated a maximum of \$240 million that will be available for this solicitation. But 80 percent of the \$1.2 billion over five years is going to be spent on R&D, which is exclusive of this project. We feel that's the appropriate role for the Federal Government.

Q.19 If more than one consortium uses the same infrastructure facilities, that implies two or more projects can be in the same region. Is that likely, or is there a goal to spread the work out to increase local public awareness?

A.19 It is possible for two or more consortia to use the same infrastructure facilities. However, it would have to be clear who the prime is and how the project was being cost shared by each partner.

Q.20 There may be exceptions to what will count as cost share determined by the contract start date. Who can we talk with about possible exceptions?

A.20 The DOE Golden contact is who you talk to. You should send questions about that to Jim Damm. His email address is h2validation@go.doe.gov.

Q.21 Is it required that prime be either an automaker or energy company?

A.21 Yes.

Q.22 Is there a preference for the military sites or refueling stations mentioned in the pre-solicitation?

A.22 No. All the Applications will be evaluated against the criteria. It wasn't meant to be an exhaustive list or a prescriptive list. They represent possible options for second or third geographic regions in case organizations haven't considered candidates in other areas.

Q.23 Is there a minimum number for co-production units?

A.23 No.

Q.24 Will the attendee list be made available? (Potential partnering opportunities).

A.24 Yes. It is now available at www.eere.energy.gov/hydrogenandfuelcells.

Q.25 Page two states "on-site hydrogen production is required when using fossil resources..." Is on-site separation acceptable?

A.25 On-site hydrogen production will no longer be required.

Q.26 Are off-road fuel cell powered work vehicle fleets eligible?

A.26 No.

Q.27 The vehicle range target is 300 miles. Current range is ~150 miles. Should Applications include a technology component to increase range (new/better storage, etc.)?

A.27 Generation 1 vehicle range target is 200 miles. The vehicle range target of 300 miles is for Generation 2 vehicles in 2008. We do expect a technology component to help increase the range from the Generation 1 target to the Generation 2 target.

Q.28 If you are an infrastructure partner, will the DOE be able to put you in touch with other potential partners before the process starts?

A.28 No.

Q.29 What will you be considering as parameters for defining an energy company? For instance, would a private biomass cogen facility that produces hydrogen be considered an energy company?

A.29 No. The solicitation will provide a definition of an energy company, but a private cogen facility provider would not be considered an energy company if that was the only activity of the company.

Q.30 Resources were pointed out as important criteria. What about marketing abilities and resources associated with marketing and visibility?

A.30 Marketing and education or outreach [visibility] are currently objectives in the statement of objectives.

Q.31 Will any preference be given to inclusion of the DARPA and DOT-based regional advanced transportation technology consortia? (Formerly the Electric and Hybrid Electric Vehicle Program (DARPA) and the Advanced Vehicle Program at DOT).

A.31 No preference will be given. The Applications will be evaluated equally to all the criteria.

Q.32 Are there any specific parameters for location and scope? For example, if the project is connected centrally could it span down a highway? How broad will your requirements be?

A.32 We won't comment on that. If there's a later need for more clarification after the solicitation is posted, a question may then be submitted.

Q.33 The energy companies can only participate in a limited number of demonstrations at any time, so we must choose carefully. Is the DOE planning or considering any other validation programs similar to this one in the near future?

A.33 No. We're trying to consolidate all of our validation activities into this integrated project. We will have future R&D solicitations, like for hydrogen production. They will mainly be geared toward research and not demonstration.

Q.34 To approach the \$3/kg cost for hydrogen, we need to have some reasonable volume of H₂ production that is loaded into cars. Even with co-production of electricity this needs a large number of cars at each station filling everyday to get H₂ volumes up to what will be needed. With the very few hydrogen cars anticipated to be at any site at any time, this looks very difficult to achieve. Can you consider limiting the sites so each is large enough to actually demonstrate reasonably priced, high volume H₂ production?

A.34 The proposers can show through analysis that with the technology being demonstrated, they can achieve the goal of \$3/gallon gasoline equivalent when there are sufficient numbers of vehicles to support at the station.

Q.35 Do you have an estimated split on each project between the funds for cars and for the infrastructure?

A.35 No.

Q.36 Hydrogen Purity Specification: 99.9%. Has USCAR commented? Are there no other requirements? (Today, OEMs want 5-9s +...).

A.36 We're not aware of 5-9s plus. We're asking for at least 99.9% purity. If an OEM has a more stringent requirement, they should discuss it, as well as any other purity requirements, with their energy company partner.

Q.37 Do stations need to be actually constructed to fuel 50 and 100 vehicles or only shown that they "could" do this with supporting design information? A fleet that might consist of 50 vehicles maximum is an inadequate fleet for a station constructed for 100 fuelings per day.

A.37 Stations need to show that they could do this with supporting design information.

Q.38 The information gives the impression that there needs to be multiple refueling sites. How many refueling sites must there be?

A.38 Please refer to the solicitation when issued for the Statement of Objectives, requirements and evaluation criteria.

Q.39 Could higher priority be given to projects that would expand a hydrogen fueling infrastructure such as that currently underway in Southern California?

- A regional network would allow greater in-use demonstration earlier.
- Promotes constructive competitiveness among technologies to "make it work."
- Provides for introduction of more vehicles earlier without the need to build large volume (more expensive) refueling capacity.

A.39 All Applications will be evaluated using the same criteria. We are only going to cost share work under this Cooperative Agreement.

Q.40 Will higher consideration be given to those areas where government (public) co-funding is available such as South Coast (have committed up to \$4 M to date to various hydrogen/fuel cell projects – see attachment)?

- Provides greater leverage of limited financial resources.
- South Coast AQMD is seeking to fund additional hydrogen ICE/fuel cell projects this calendar year (~\$2-4 M).

A.40 No preference will be given. However, state and local funding can certainly contribute to the private sector cost share and thereby make the Application stronger.

Q.41 “Only 100% hydrogen fueled vehicles accepted.” What about sodium borohydride?

A.41 It is acceptable if it provides pure hydrogen.

Q.42 What about direct methanol?

A.42 No.

Q.43 Is natural gas the only permissible fossil fuel? Will liquid/solid hydrocarbon affect Application grading?

A.43 We are not mandating natural gas. Any fossil fuel will be evaluated against the criteria.

Q.44 Will DOE provide a clearinghouse to facilitate formation of teaming agreements?

A.44 No, but the attendee list from the March 19 meeting is available on the program website.

Q.45 What is the project funding start date?

A.45 Selection date is expected to be the 4th quarter of 2003 (calendar year). The award date is expected to be 1st quarter of 2004 (calendar year).

Q.46 For eligible vehicle types: Light duty vehicles and LDT and MDPV are mentioned, as are light and heavy-duty trucks, such as large passenger vans and urban delivery trucks. Will buses be considered, either smaller shuttle type buses or larger transit buses?

A.46 No. Buses are currently being considered as part of the Department of Transportation research and development activities.

Q.47 Common themes/areas of interests such as codes and standards, safety, etc. Can DOE fund these from a common pool of funds, or does each awardee have to “reinvent the wheel” and spend duplicate funds to develop these areas?

A.47 We will proceed with each individual organization doing their own codes and standards, but after the awards are made, we will investigate the possibility of organizing a single effort in this area with the awardees.

Q.48 This solicitation is predisposed toward gaseous hydrogen stored at 350 or 700 bars. Gaseous hydrogen even at 700 bars does not satisfy range targets. How do alternative storage systems, i.e. chemical hydride, methanol reforming, etc., become a part of the evaluation?

A.48 The goal for 2008 is a 300-mile range. We recognize that the earlier storage systems may have to be gaseous hydrogen. During Generation 1, there are interface issues and a lot to be

learned about vehicles that have gaseous storage. In the next Generation, we hope to incorporate advanced prototypes to achieve the 300-mile range target. We can't say what those types might be. That's up to the proposer to try to put forward ideas and achieve the 300-mile range, and what storage systems they're going to use. However, methanol reforming is not a candidate on the vehicle. Methanol could be reformed off-board. It is to be hydrogen storage on the vehicle.

Q.49 I am assuming all vehicles will have only gaseous hydrogen on board storage produced from SMR or electrolysis. Correct?

A.49 No. Autothermal reforming is another option, but in general we are looking for distributed generation concepts that are viable during the early transition strategy. Gaseous hydrogen storage is considered an option for early vehicles, but other storage approaches could be considered for both Generation 1 and 2 vehicles. However, off-site generation with transportation of the hydrogen to the site is an option that also can be considered.

Q.50 This solicitation seems to advantage technology which is close to commercialization and not emerging technology in hydrogen storage technology. How will new technologies be addressed?

A.50 The aim is to incorporate more advanced technologies. We feel like the goals that we've outlined in terms of the range requirement, in terms of the cost per hydrogen, and the durability of 2000 hours under real world operating conditions are future targets that are beyond existing technology and would require advanced vehicle and hydrogen system and component technologies.

Q.51 The cost of H₂ is higher today and in the foreseeable future. Is any consideration being given to subsidizing the cost differential to operate these vehicles in the program?

A.51 The costs provided in the Application should include everything including the fuel. The cost of hydrogen will be subject to the 50/50 cost share.

Q.52 How specific do you expect the definition of the Gen 2 vehicles? Technology is changing rapidly and it may be too early to specify what improvements should be expected.

A.52 We would expect in the Application a much better specification of Generation 1 vehicles than Generation 2 vehicles. However, approaches to achieve the more stringent targets of Generation 2 vehicles that can be described would provide for a stronger Application.

Q.53 DOE has encouraged partnering with other agencies and/or state and local governments. Can funds from these sources also be used to offset OEM or Energy Provider costs?

A.53 Funds from state and local governments can be used as private cost share, but funds from federal agencies, e.g. DOT and DOD, will count toward the federal cost share.

Q.54 If vehicles can be on-site before a fueling station, is bottled gas okay to start with?

A.54 The sequence of the fueling infrastructure that is to be provided is up to the proposer to specify.

Q.55 Is DOE planning to seek a program waiver (in advance) to allow for retention of IP rights by the contractor and subs?

A.55 Yes. DOE intends to issue a class waiver of patent rights for this solicitation.

Q.56 Can multiple DOE awarding teams use the same professional program management organization like researchers do for non-profit?

A.56 We won't restrict that.

Q.57 Why is methanol excluded?

A.57 This program is for the development of pure hydrogen vehicles. However, methanol as a fuel for off-board reforming has not been excluded.

Q.58 What will the federal cost share be for Generation 1 ICE vehicles by non-USCAR manufacturers?

A.58 There is no federal cost share.

Q.59 Can some of the application requirements be included in project tasks instead of the application?

A.59 We're going to reconsider the level of detail required in the application when the solicitation is issued. However, more detail will assist DOE in the evaluation of the applications.

Q.60 I understand that DOE expects to award 3-5 projects for the program. I believe that discussion within each project is important and also discussion between projects (ex, between GM project and Nissan project) is very important too. One example is codes and standards. Are there any periodical events to promote the discussion between projects? Are they closed meeting by participating companies? I understand that there is an annual conference of all companies' participation in the program. Is the annual meeting only one to discuss each together? Is the annual meeting closed meeting by participating companies?

A.60 We anticipate having two review meetings during the year on each project. One would be the annual review that is open to everyone. The other one would be closed except for the government representatives and the team members of the particular project being reviewed. In addition, there would be other meetings with the team members as needed throughout the year. Codes and standards is an activity that after awards are made, we would confer with our partners to see if a unified effort might not be possible.

Q.61 The thrust of your procurement is demonstration and validation of currently available technologies, and you provide for "second Generation" technologies in the latter part of the

project. You specifically require use of new technologies which will allow greater vehicle range. The question is: Should a Application include a technology development component designed to enhance range (e.g. increased fuel cell/motive power efficiency or greater on-board hydrogen storage) or should one assume that technology development will be accomplished in another part of the DOE program and this project will utilize those new technologies in the second phase?

A.61 You can include a technology development component to increase range. The solicitation will describe in more detail as to what technology development will be allowed and what won't.

Q.62 Does burning woodchips in a conventional electric power plant coupled to an electrolysis hydrogen production system qualify as using a renewable resource?

A.62 Yes.

Q.63 What is the definition of the non-DOE cost share? Will standard industry project cost practices be acceptable to DOE?

A.63 The answer can be found on the Golden Field Office website: www.go.doe.gov . Under the business opportunity section, there are Application forms and standard provisions that we include in financial assistance. There are also links which go to the DOE financial assistance regulations, 10 CFR 600, that identify cost share and what makes up cost share.

Q.64 Is a State allowed to participate in more than one successfully awarded bid? (The RFP stated that three to five bids would be awarded).

A.64 Yes, they would be able to take a partner on more than one application.

Q.65 Education and Outreach Funding (Section: 4.6 Education). The proposal requires a significant (and very important) education and outreach component but there is no explicit funding within the program (federal cost share section 1.4) to pay for such education and outreach. Is it DOE's expectation that the award recipient would pay for such or could additional funding be made available? Recommendation: Provide cost share and/or direct funding to programs/entities (e.g. universities) to provide such education and outreach.

A.65 50/50 cost share overall exclusive of education activity by universities. 10/90 private sector to government cost share for university participation in education task.

Q.66 Infrastructure Performance Measures-Definitions (Table 2, pg. A-8). "Fast Fill Capacity: The station must have the ability to fast fill five or more vehicles one immediately after the other. The station must have the capacity to fill a total of 50 vehicles in a one-day period (24 hours) by 2006. By 2008, the station must demonstrate the capability to fill vehicles in parallel, with a capacity to fill a total of 100 vehicles in a one-day period (24 hours)."

This requirement potentially does the following:

Possibly restricts/eliminates the use of small to medium-scale electrolyzers for hydrogen production. This includes the so-called “home refueling units” as well as electrolyzer-based “community refueling units;” and places a minimum requirement on hydrogen storage and/or hydrogen compressor capacity that might not match the needs of the end-users (potentially overly excessive for early small-scale fuel needs).

Does DOE intend for this?

A.66 For this particular solicitation, we want to stick to public refueling facilities. We don’t want to go into the area of developing home or community refueling units for this solicitation.

Q.67 Safety: ((Table 2, pg. A-8)). “Record the number and type of alarms during hydrogen production, delivery, transfer, and vehicular filling. The station must be supplied with redundant alarms based on two different technologies to cover each predicted failure that would result in a hydrogen release.”

Requiring redundancy is recommended, but requiring multiple technologies for EACH predicted failure may be unreasonable. If DOE is interested in evaluating multiple failure control technologies, they are likely to achieve this by funding multiple projects with different control strategies as opposed to requiring single projects to provide multiple technologies.

A.67 We will re-look at that, the backup alarm systems and all. We will say the proposer has to assure that safety is covered and there are safety plans in the work that’s being done.

Q.68 Hydrogen-Powered Vehicles. (A.4.0: Objectives). “Only 100% hydrogen-powered vehicles will be accepted.” This suggests that there will be no funding provided for CNG/H2 blend vehicles? If not, why? This has been previously proposed (by DOE) as a potential “bridge to hydrogen.”

A.68 This is for the development of hydrogen fuel cell vehicles. The only bridging strategy being considered is hydrogen ICE vehicles with advanced technology components.

Q.69 Hydrogen Infrastructure. (A.4.0: Objectives). “The definition of infrastructure includes hydrogen production and/or delivery, hydrogen storage, the refueling system, and any associated land, buildings or other civil/structural facilities required. The guidelines include:
“A vehicle maintenance facility must be at the site location.”

Why must a vehicle maintenance facility be included at the infrastructure site? Does this preclude existing gasoline stations without vehicle facilities from placing infrastructure? If so, why? Does DOE intend to provide funding for vehicle maintenance facilities?

A.69 This has been reconsidered, and the vehicle maintenance facility is not required to be located at the infrastructure site. Applicants may propose any type of arrangement for vehicle maintenance facilities, and the arrangement will be reviewed as part of the Application. Vehicle maintenance facilities are considered as an integral part of infrastructure and, if the maintenance facility is part of the Application, it will be eligible for Federal cost share.

Q.70 Vehicle Maintenance Facility Engineering, Permitting, and Construction (A.5.1, #7). “The applicant shall provide an engineering package including calculations and sketches showing the requirements for the vehicle maintenance facility. Actual permitting, location on the selected site, final design and construction shall be accomplished in conjunction with other similar facilities as determined by the site team/project manager. The site arrangement and design shall be reviewed by DOE within 60 days. The ability of DOE and DOE contractor personnel to visit the maintenance facility shall be specified.” Again, does DOE intend to provide funding for vehicle maintenance facilities including those independent of infrastructure?

A.70 See Answer to Question 69.

Q.71 Funding. This program has extensive requirements for data collection and program management, yet there does not appear to be explicit funding for this. Is it expected that the award recipient would pay for such? Could additional funding be made available for this?

A.71 The Application should include explicit costs for this activity and it would be eligible for cost share.

Q.72 What are your planned dates for the opening and closing of this solicitation? What are the planned dates for other related solicitations?

A.72 We anticipate issuing the solicitation on April 15, 2003. Applications would be due 90 days after it's issued. For information on related solicitations please see “Financial Opportunities” on the program website.

Q.73 What is the reasoning behind the expectation that there will be three to five projects? Is it a desire for projects of a certain scale, a desire for projects covering a certain number of regions, a tagging of projects to the three major automakers?

A.73 The estimate is consistent with the expected availability of funds for demonstrations as part of the President's Hydrogen Fuel initiative and the expected interest from industry for this activity. It could be less than three and more than five depending on the funding requirements and the quality of the responses.

Q.74 Page 2: It was mentioned that second Generation vehicles must be tested in cold climate locations. Is the cold climate site required in time to test the second-Generation vehicles or for the entire project?

A.74 The cold climate site can be for either, but becomes mandatory for second Generation vehicles.

Q.75 Page 2, 1.2: The hydrogen production technologies / supply paths are bounded quite narrowly (must contain renewables, productions from natural gas must be on-site, ...). What is the reasoning behind this? The tight boundaries do not seem to allow the demonstration projects to learn from the important process of evaluating feasibility and costs of multiple hydrogen

supply paths for each specific location. Making decisions on the supply paths seems more like a project activity (like site selection) than required information for the solicitation. At a minimum there should be some flexibility allowed for shifts in a best estimate, which might be provided in the solicitation, if the more detailed hydrogen supply path investigation does not confirm the original option. For example, it seems legitimate to explore supply options like large-scale production from natural gas via pipeline or with purification steps and it seems legitimate to not add a renewables production option until perhaps along with second-Generation vehicles.

A.75 Renewable systems do not have to provide all the hydrogen at one station, but the early utilization of renewable energy is encouraged. Other supply options like large-scale production of hydrogen from natural gas via pipeline or with purification steps are considered as viable systems to be demonstrated.

Q.76 Page 2-3, 1.3 Teaming: Is this a list of ideas of types of partners that could be valuable on a project (e.g. choose from this list), or is one of each type of organization from this list necessary on a project?

A.76 You don't necessarily have to have every partner that we outlined. An automobile manufacturer and an energy company are required. A major program policy factor will be inclusion of small businesses and universities. If we have two Applications that are fairly close in score, and one has small businesses and universities, we can use a program policy factor and select the one that has a better representation of small business and universities.

Q.77 Top of page A-15, A.4.0: It is unclear as to why the vehicle maintenance facility is required to be on the hydrogen infrastructure site and why near to infrastructure site or at fleet owner or operator site is not acceptable.

A.77 The maintenance facility can be near to the infrastructure site, or at the fleet owner or operator site.

Q.78 The amount of details the proposal is requesting; i.e., describe the sequence of start-up, DOE needs to take a careful look at these requirements in determining how much time to respond. Given the complexity, site-specific details and partners that this proposal involves, would we have more time than normal (60 days) to respond to the proposal once it is open?

A.78 Applications would be due 90 days after it's issued.

Q.79 How does DOE propose to keep certain information requested from the respondents confidential? Upon selection of successful candidates, these proposals generally become public information. How do we protect business-sensitive information that we may have included in the proposal?

A.79 Regarding the protection of confidential information, DOE follows the procedures described in its financial assistance regulations at 10 C.F.R. § 600.15 Authorized uses of information. Applicants are responsible for identifying the data requiring protection in their Applications in accordance with those procedures. The Department's policy is to use data

included in applications for evaluation purposes only and to protect such information from unauthorized use or disclosure. Data identified as containing trade secrets or proprietary information will not be disclosed or used for any purpose other than evaluation of Applications except to the extent provided in any resulting award or as required by law, including the Freedom of Information Act (FOIA).

Q.80 How does DOE plan to deal with IP that may be developed under the proposal?

A.80 DOE plans to issue a class waiver of patent rights which will allow recipients to retain title to subject inventions developed under the awards resulting from this solicitation. The terms of the advance waiver can be found at FAR 52.227-12, as supplemented by 10 C.F.R. 784, DOE's patent waiver regulations, and are subject to such mutually acceptable modifications as may be appropriate considering the nature of the technology, the U.S. manufacturing base, and the relevant markets. DOE will include its standard intellectual property provisions for research, development and demonstration in each award document. Prospective applicants may review these provisions at the website for the DOE Chicago Operations Office, Office of Intellectual Property Law, Internet address: <http://www.ch.doe.gov/IPL/clause/ipset.htm>. Prospective applicants may submit additional questions regarding the intellectual property provisions after the solicitation has been issued.

Q.81 Goals mentioned: are the project goals mentioned mandatory project specifications, or general targets to shoot for?

A.81 The goals are considered targets; they are not considered mandatory goals. Certainly as we look at Applications and evaluate activities, we certainly would want to see concerted efforts to achieve the targets that are stipulated in the solicitation.

Q.82 If one party does not meet its performance goals, and others do, does that nullify the agreement?

A.82 Not automatically. The cooperative agreement is with the prime. The prime would have the leeway to provide a plan that would rectify the situation or present alternative targets.

Q.83 Can respondents respond to more than one solicitation, such as a prime to one and a sub to another, with different partners, and/or different sites?

A.83 Yes.

Q.84 Section 1.4 Cost Share: The formula we use to determine the cost of the fuel cell vehicle is component cost plus direct development costs for example, design, testing and crash tests. Can direct research costs also be added to the cost of the vehicle?

A.84 Component and direct development costs will be allowed for Generation 2 vehicles. That can include directly associated system design, testing and crash tests of Generation 1 and 2 vehicles for the development of standards. Those research costs that are directly attributable the incorporation of new technology on Generation 2 vehicles and are not associated with ongoing or

other activities that are being done in the normal course of vehicular development or other government contracts will be allowed.

Q.85 Will the government cost share vehicle support and program management costs?

A.85 Yes, the government will cost share vehicle support and program management costs.

Q.86 For phase two, several Generation 1 vehicles may be upgraded with new technology. What costs will DOE cover on the upgraded vehicle?

A.86 Costs to upgrade the vehicles from Generation 1 to 2 are allowable project costs that can be cost shared by DOE per the solicitation guidelines.

Q.87 For phase two we anticipate validating components and vehicles that, in some cases, we will apply for research funding from DOE for support. How can we coordinate the research programs with the validation program?

A.87 Research done on other research programs would be considered to be independent of this activity if funded by the Federal Government. As far as being able to somehow coordinate that activity, that would really be up to the organization or the company that was involved in both activities to coordinate that. There wouldn't be any explicit requirement here to coordinate that sort of activity.

Q.88 We are an Associate Member of the California Fuel Cell Partnership (CaFCP) providing methanol through an on-site refueling station for fuel cell vehicle testing and demonstration. We are also currently negotiating contracts to provide on-site reformation of methanol-to-hydrogen for various fuel cell testing and demonstration applications.

As such, per criteria established on Page 2 Section 1.3 "Teaming", can we be considered both a hydrogen company and an energy company? Will on-site methanol reformation to hydrogen be considered an acceptable method of hydrogen production?

A.88 On-site methanol reformation to hydrogen is considered an acceptable method of hydrogen production. We feel that would qualify you as a hydrogen supplier but not as an energy company. You can review the new definition of an energy company in the solicitation.

Q.89 The document (footnote p.2; glossary) states that a geographical region is defined as "an area with different climactic conditions." Also, on page 2, the DOE states "By the second Generation vehicle technology, at least one of the geographic regions must be a cold climate region."

Can the DOE further define "cold climate region"? Is there a temperature spectrum, which might further define this statement?

A.89 Yes, it will be defined in the solicitation.

Q.90 The DOE references renewable energy throughout the Statement of Objectives and specifically states that “Prospective applicants shall include at least one hydrogen production system that uses renewable feedstocks for at least part of the hydrogen production at a refueling station.”

Page 2 of the Statement of Objectives also states that on or off-site production will be allowed for renewable sources. Although the definition of renewable sources in the glossary is not prescriptive, ongoing controversy over defining renewable sources in general would make it important to make this source explicitly acceptable.

Is methane landfill gas considered a renewable resource by the DOE in the Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project Statement of Objectives?

A.90 We will consider methane landfill gas a renewable for the solicitation.

Q.91 We would like clarification of 3.0 Eligibility requirements (p5). The first requirement states that the proposed project “must be conducted at a facility located in the United States.” We would like clarification on how this is determined.

Will the DOE accept projects that are “transnational” such as a cross-border fuel cell vehicle and infrastructure testing and demonstration project involving states in the Pacific Northwest and utilizing existing resources in British Columbia?

A.91 All costs incurred by the awardee for activities in the U.S. will be available for cost share. The facility must be physically located in the United States. The U.S. portion and allowable Applicant portion of the cost share will be for those elements that exist in the U.S.

Q.92 We are a Vancouver, B.C.-based company; however, we are incorporated and pay taxes in the U.S., sell 2.5 million tons (approximately) of methanol in the U.S. each year, and employ numerous American citizens.

As such, we would like further clarification as to the participation in the H2 Infrastructure Validation Project of companies not based in the United States. How will this be determined? Will there be further definition as per a “prime contractor,” award participant and secondary team members?

A.92 The 50/50 cost share will be applied to facilities located in the U.S.

Q.93 According to the solicitation, DOE proposes that the prime applicant must be an energy company or an auto manufacturer. As an alternative, is DOE receptive to a prime applicant who can demonstrate all of the following capabilities: extensive experience in hydrogen infrastructure and delivery including all modes of hydrogen generation, storage and distribution, a track record in managing up to \$1/4 Billion international projects with strategic partners, an impeccable safety record in hydrogen technology and strategic relationships with the major energy and auto companies?

A.93 There will be a new definition of an energy company in the solicitation and you can see if your company now qualifies.

Q.94 Please provide a definition of an “energy company.”

A.94 There will be a definition of an energy company in the solicitation.

Q.95 Please provide a definition of an “automobile manufacturer.”

A.95 There will be a definition of an automobile manufacturer in the solicitation.

Q.96 Please provide a definition of a “utility.”

A.96 There will be a definition of a utility in the solicitation.

Q.97 Can installed infrastructure service more than one consortium’s vehicles?

A.97 Yes, but costs would have to be apportioned to each consortia for services rendered.

Q.98 Can installed infrastructure receive funding from more than one consortium?

A.98 Yes, but not if it were built prior to cooperative agreement and can not receive more than 50% of the facility cost.

Q.99 Please verify the identity of the USCAR automobile manufacturers.

A.99 DaimlerChrysler, Ford, General Motors.

Q.100 Will the award for this solicitation obligate funding for the entire project at award, or will the funding be obligated in sequential periods shorter than the total contract duration?

A.100 The anticipated share by the Government is 150 to 240 million dollars over the five-year project. But this is subject to an annual appropriation process and, therefore, increments will be obligated each year. The FY2004 budget submission to Congress was for a total of about 25 million dollars devoted to this project.

Q.101 What involvement will the DOE have post award in determining the scope of work or modifying the proposed scope of work?

A.101 This will be defined in the resulting Cooperative Agreements with each recipient of the financial assistance.

Q.102 Will additional competitive bidding be required during the contract duration (e.g. competition among the awardees for work beyond that obligated with the award)?

A.102 No.

Q.103 What is the perspective of the reviewers regarding small modular biomass to hydrogen systems?

A.103 It would be considered as a renewable option.

Q.104 Will there be an opportunity to demonstrate biomass gasification or pyrolysis oil steam reforming to make hydrogen in small systems that could be located on-site with the hydrogen dispensing equipment?

A.104 Yes.

Q.105 Will you consider hydrogen-powered ICE hybrid electric vehicles?

A.105 Yes, as qualified in the solicitation.

Q.106 Will you consider 50/50 cost share for hydrogen-powered ICE HEVs, since they will provide 99% of the societal benefits of FCVs, only at an earlier time?

A.106 There will be a cost share schedule presented in the solicitation that will address this.

Q.107 Can you briefly describe the implementation process including:

- Timing of the program
- Submission of proposals
- When and how will participants be selected and notified of their acceptance? Is there a limit to the number of participants in the program?
- Will the demonstrations all run concurrently or will there be some flexibility in the timing of different projects based on availability of vehicles?
- When do you expect or require all demonstrations to begin and is there an established completion date?

A.107 We anticipate issuing the solicitation on April 15, 2003. Applications will be due 90 days after it is issued. We anticipate making selections by the 4th quarter of 2003 (calendar year) and making awards in the 1st quarter of 2004 (calendar year). DOE will select participants through an objective merit review process. Successful applicants will be notified in writing. The number of participants (approximately 3-5) will be driven by the budget. The demonstrations will all run concurrently, and each project will run on its own schedule. This is a five-year program.

Q.108 Can you briefly describe the level of interaction between manufacturers, suppliers and DOE?

A.108 Deliverables and review meetings will be specified in the solicitation. The meetings between team members are at the discretion of the consortia.

Q.109 Will a progress reporting timetable be established?

A.109 The report requirements will be listed in the solicitation.

Q.110 Is there a particular format and/or distribution list for necessary reports?

A.110 This will be specified in any resulting award.